Reissue Application No.: 10/626,376

Reissue of Patent No.: 6,363,745

Page 3

C. Amendment to the Claims

This listing of claims will replace all prior versions, and listings, of claims in this application.

1. (Previously presented) A cut cornered mixed cut gemstone, comprising a girdle, a

crown above said girdle and a pavilion below said girdle,

said crown comprising a width and length formed by two pairs of opposing crown sides

and four crown corners, each crown side and corner having a length along the girdle, said corner

length being substantially less than said side length, said crown also comprising at least two

steps, including a first step from the girdle to a crown break, and a second step from the crown

break to a table break, said crown break defined by lines parallel with said girdle, said crown also

having a substantially flat table, said table having one facet having four sides and four corners

defined by lines parallel with said girdle, said table corner length being substantially less than

said table side length,

said pavilion having a bottom and comprising a substantially centrally located culet at the

bottom of the pavilion, said pavilion also comprising two pairs of opposing pavilion sides and

four pavilion corners defined by eight rib lines extending from the girdle to the culet, wherein

each rib line extends in a substantially straight line when viewed from the bottom of the pavilion.

2. (Original) The gemstone according to claim 1, wherein the rib lines extend

substantially continuously from the girdle to the culet.

3. (Previously presented) A cut cornered mixed cut gemstone, comprising a girdle, a

crown above said girdle and a pavilion below said girdle,

said crown comprising a width and length formed by two pairs of opposing crown sides

and four crown corners, each crown side and corner having a length along the girdle, said corner

length being substantially less than said side length, said crown also comprising at least two

steps, including a first step from the girdle to a crown break, and a second step from the crown

break to a table break, said crown break defined by lines parallel with said girdle, said crown also

having a substantially flat table, said table having one facet having four sides and four corners

defined by lines parallel with said girdle,

Reissue Application No.: 10/626,376

Reissue of Patent No.: 6,363,745

Page 4

said pavilion having a bottom and comprising a substantially centrally located culet at the bottom of the pavilion, said pavilion also comprising two pairs of opposing pavilion sides and four pavilion corners defined by eight rib lines extending from the girdle to the culet, wherein each rib line extends in a substantially straight line when viewed from the bottom of the pavilion, wherein the pavilion sides and corners each comprise a plurality of facets.

4. (Previously presented) A cut cornered mixed cut gemstone, comprising a girdle, a crown above said girdle and a pavilion below said girdle,

said crown comprising a width and length formed by two pairs of opposing crown sides and four crown corners, each crown side and corner having a length along the girdle, said corner length being substantially less than said side length, said crown also comprising at least two steps, including a first step from the girdle to a crown break, and a second step from the crown break to a table break, said crown break defined by lines parallel with said girdle, said crown also having a substantially flat table, said table having one facet having four sides and four corners defined by lines parallel with said girdle,

said pavilion having a bottom and comprising a substantially centrally located culet at the bottom of the pavilion, said pavilion also comprising two pairs of opposing pavilion sides and four pavilion corners defined by eight rib lines extending from the girdle to the culet, wherein each rib line extends in a substantially straight line when viewed from the bottom of the pavilion, wherein each pavilion side has only two facets along each rib line.

5. (Original) A cut cornered mixed cut gemstone, comprising a girdle, a crown above said girdle and a pavilion below said girdle,

said crown comprising a width and length formed by two pairs of opposing crown sides and four crown corners, each crown side and corner having a length along the girdle, said corner length being substantially less than said side length, said crown also comprising at least two steps, including a first step from the girdle to a crown break, and a second step from the crown break to a table break, said crown also having a substantially flat table,

Said pavilion having a bottom and comprising a substantially centrally located culet at the bottom of the pavilion, said pavilion also comprising two pairs of opposing pavilion sides and four pavilion corners defined by eight rib lines extending from the girdle to the culet, wherein

Reissue Application No.: 10/626,376

Reissue of Patent No.: 6,363,745

Page 5

each pavilion corner has only two facets along each rib line.

6. (Previously presented) A cut cornered mixed cut gemstone, comprising a girdle, a crown above said girdle and a pavilion below said girdle,

said crown comprising a width and length formed by two pairs of opposing crown sides and a flat table, said table having four sides and four cut corners, said table sides being substantially parallel with the girdle, said table corners being substantially less in length than said corners,

said pavilion having a bottom and comprising a substantially centrally located culet at the bottom of the pavilion, said pavilion also comprising two pairs of opposing pavilion sides and four corners defined by rib lines extending from the girdle to the cutlet, said rib lines extending in a straight line from the girdle to the cutlet when viewed from the bottom of the pavilion, wherein each pavilion side comprises at least three facets each having a facet corner intersecting at a common facet intersection point.

7. (Previously presented) A cut cornered mixed cut gemstone comprising a girdle, a crown above said girdle and a pavilion below said girdle,

said crown comprising a width and length formed by two pairs of opposing crown sides and a substantially flat table, said table having four sides and four cut corners, said table sides being substantially parallel with the girdle, said table corners being substantially less in length than said table sides,

said pavilion having a bottom and comprising a substantially centrally located culet at the bottom of the pavilion, said pavilion also comprising two pairs of opposing pavilion sides defined by rib lines extending from the girdle to the culet, said rib lines extending in a straight line from the girdle to the culet when viewed from the bottom of the pavilion, wherein each pavilion side comprises a plurality of facets each having a facet corner intersecting at a common facet intersection point, wherein the plurality of facets on each pavilion side is at least four.

8. (Previously presented) A cut cornered mixed cut gemstone, comprising a girdle, a crown above said girdle and a pavilion below said girdle,

said crown comprising a width and length formed by two pairs of opposing crown sides

Reissue Application No.: 10/626,376

Reissue of Patent No.: 6,363,745

Page 6

and a substantially flat table, said table having four sides and four cut corners, said table corners being substantially less in length than said table sides,

said pavilion having a bottom and comprising a substantially centrally located culet at the bottom of the pavilion, said pavilion also comprising two pairs of opposing pavilion sides defined by rib lines extending from the girdle to the culet and two pairs of opposing pavilion corners, wherein each pavilion side and corner comprises a plurality of facets, and wherein each pavilion side and corner has only two facets along each rib line.

9. (Previously presented) A cut cornered mixed cut gemstone, comprising a girdle defined by girdle lines, a crown above said girdle and a pavilion below said girdle,

said crown comprising a width and length formed by two pairs of opposing crown sides and four crown corners, wherein each crown side intersects with its adjacent corners at about the same angle of intersection, said crown also comprising at least two steps, including a first step from the girdle to a crown break, and a second step from the crown break to a table break, said crown also having a flat table, said table having one facet having four sides and four corners defined by lines parallel to said girdle lines, and wherein all of the steps in each side of the crown have the same facet corner angles as all of the other steps in each crown side,

said pavilion having a bottom and comprising a substantially centrally located culet at the bottom of the pavilion, said pavilion also comprising two pairs of opposing pavilion sides and four pavilion corners defined by eight distinct rib lines extending from the girdle entirely to the culet, said pavilion sides and corners extending entirely to the cutlet.

10. (Previously presented) A cut cornered mixed cut gemstone, comprising a girdle defined by girdle lines, a crown above said girdle and a pavilion below said girdle,

said crown comprising a width and length formed by two pairs of opposing crown sides, four crown corners, said crown also comprising at least two steps, including a first step from the girdle to a crown break, and a second step from the crown break to a table break, each crown corner having a facet defined by a facet line common with a girdle line, said crown also having a substantially flat table, said table having four sides and four cut corners, said table corners being substantially less in length than said table sides,

said pavilion having a bottom and comprising a substantially centrally located culet at the

Reissue Application No.: 10/626,376

Reissue of Patent No.: 6,363,745

Page 7

bottom of the pavilion, said pavilion also comprising two pairs of opposing pavilion sides and four pavilion corners defined by eight rib lines extending from the girdle to the culet, wherein facet intersection lines in the pavilion define where two facets have a common side, said pavilion

being devoid of any facet intersection lines parallel with the girdle.

11. (Previously presented) A cut cornered mixed cut gemstone, comprising a girdle, a

crown above said girdle and a pavilion below said girdle,

said crown comprising a width and length formed by two pairs of opposing crown sides and a substantially flat table, said table having four sides and four cut corners, said table corners

being substantially less in length than said table sides,

said pavilion having a bottom and comprising a substantially centrally located culet at the bottom of the pavilion, said pavilion also comprising two pairs of opposing pavilion sides and four corners defined by rib lines extending from the girdle to the culet, wherein each pavilion side and corner comprises a plurality of facets each having a facet corner intersecting at a common facet intersection point inwardly of said rib lines, and wherein each pavilion side and corner has a

facet with a facet corner at the culet.

12. (Previously presented) A cut cornered mixed cut gemstone, comprising a girdle, a

crown above said girdle and a pavilion below said girdle,

said crown comprising a width and length formed by two pairs of opposing crown sides

and a substantially flat table having four sides and four cut corners,

said pavilion having a bottom and comprising a substantially centrally located culet at the bottom of the pavilion, said pavilion also comprising two pairs of opposing pavilion sides and four corners defined by distinct rib lines extending from the girdle to the culet, wherein each rib line extends in a substantially straight line when viewed from the bottom of the pavilion, wherein each pavilion corner has a plurality of facts, and wherein each pavilion side comprises a plurality of facets each and every one of said plurality having a facet corner intersecting at a common facet intersection point, wherein one of the facets in the pavilion side is a girdle star facet extending downwardly from the girdle, which girdle star facet has only three sides.

Reissue Application No.: 10/626,376

Reissue of Patent No.: 6,363,745

Page 8

13. (Previously presented) A cut cornered mixed cut gemstone, comprising a girdle, a

crown above said girdle and a pavilion below said girdle,

said crown comprising a width and length formed by two pairs of opposing crown sides

and a substantially flat table having four sides and four corners, said table corners being

substantially less in length than said table sides,

said pavilion having a bottom and comprising a substantially centrally located culet at the

bottom of the pavilion, said pavilion also comprising two pairs of opposing pavilion sides and

four corners defined by distinct rib lines extending from the girdle to the culet, wherein each

pavilion corner has a plurality of facets, wherein each pavilion side comprises a plurality of facets

each having a facet corner intersecting at a common facet intersection point not on any rib line

and each pavilion facet having no more than four sides, and wherein each pavilion side has a

facet with a facet corner at the culet.

14. (Previously presented) A cut cornered mixed cut gemstone, comprising a girdle, a

crown above said girdle and a pavilion below said girdle,

said crown comprising a width and length formed by two pairs of opposing crown sides

and a substantially flat table, said table having four sides and four cut corners, said table corners

being substantially less in length than said table sides,

said pavilion having a bottom and comprising a substantially centrally located culet at the

bottom of the pavilion, said pavilion also comprising two pairs of opposing pavilion sides and

four pavilion corners defined by eight rib lines extending in a straight line from the girdle to the

culet when viewed from the bottom of the pavilion, wherein each pavilion side and corner

comprises a plurality of facets, and wherein each pavilion side and corner has only two facets

along each rib line, and one facet along the girdle.

15. (Previously presented) A cut cornered mixed cut gemstone, comprising a girdle, a

crown above said girdle and a pavilion below said girdle,

said crown comprising a width and length formed by two pairs of opposing crown sides

and four crown corners, each crown side and corner having a length along the girdle, said corner

length being substantially less than said side length, said crown also comprising at least two

steps, including a first step from the girdle to a crown break, and a second step from the crown

Reissue Application No.: 10/626,376

Reissue of Patent No.: 6,363,745

Page 9

break to a table break, said crown also having a substantially flat table, said table having one facet having four sides and four corners defined by lines parallel with said girdle, said table corners being substantially less in length than said table sides.

said pavilion having a bottom and comprising a substantially centrally located culet at the bottom of the pavilion, said pavilion also comprising two pairs of opposing pavilion sides and four pavilion corners defined by eight rib lines extending from the girdle to the culet, said pavilion sides and corners extending entirely to the culet.

16. (Previously presented) A cut cornered mixed cut gemstone, comprising a girdle, a crown above said girdle and a pavilion below said girdle,

said crown comprising a width and length formed by two pairs of opposing crown sides and four crown corners, each crown side and corner having a length along the girdle, said corner length being substantially less than said side length, said crown also comprising at least two steps, including a first step from the girdle to a crown break, and a second step from the crown break to a table break, said crown also having a substantially flat table, said table having one facet having four sides and four corners defined by lines parallel with said girdle, said table corners being substantially less than said table sides,

said pavilion having a bottom and comprising a substantially centrally located culet at the bottom of the pavilion, said pavilion also comprising two pairs of opposing pavilion sides and four pavilion corners defined by eight rib lines extending from the girdle to the culet, said pavilion sides and corners extending entirely to the culet, wherein each pavilion corner has only two facets along each rib line.

- 17. (Previously presented) the gemstone according to claim 6, wherein each pavilion side has four facets each having a facet corner intersecting at a common intersection point.
- 18. (Previously presented) the gemstone according to claim 7, wherein the number of facets on each pavilion corner is at least four.
- 19. (Previously presented) the gemstone according to claim 13, wherein the common facet intersection point is about ¾ of the way from the culet to the girdle.

Reissue Application No.: 10/626,376

Reissue of Patent No.: 6,363,745

Page 10

20. (Previously presented) the gemstone according to claim 13, wherein the facet in

each pavilion side, which has a facet corner at the culet, has four sides.

21. (Previously presented) A cut cornered mixed cut gemstone, comprising a girdle, a

crown above said girdle and a pavilion below said girdle,

said crown comprising a width and length formed by two pairs of opposing crown sides

and four crown corners, each crown side and corner having a length along the girdle, said corner

length being substantially less than said side length, said crown also comprising at least two

steps, including a first step from the girdle to a crown break, and a second step from the crown

break to a table break, said crown break defined by lines parallel with said girdle, said crown also

having a flat table, said table having one facet having four sides and four corners defined by lines

parallel with said girdle, wherein all of the steps in each side of the crown are defined by straight

lines from the girdle to the table,

said pavilion having a bottom and comprising a substantially centrally located culet at the

bottom of the pavilion, said pavilion also comprising two pairs of opposing pavilion sides and

four pavilion corners defined by eight rib lines extending from the girdle to the culet, wherein

each rib line extends in a substantially straight line when viewed from the bottom of the pavilion.

22. (Previously presented) A cut cornered mixed cut gemstone, comprising a girdle, a

crown above said girdle and a pavilion below said girdle,

said crown comprising a width and length formed by two pairs of opposing crown sides

and a substantially flat table having four sides and four corners, said table corners being

substantially less in length than said table sides,

said pavilion having a bottom and comprising a substantially centrally located culet at the

bottom of the pavilion, said pavilion also comprising two pairs of opposing pavilion sides

defined by distinct rib lines extending from the girdle to the culet, wherein each pavilion side

comprises a plurality of facets each having a facet corner intersecting at a common facet

intersection point and each pavilion facet having no more than four sides, and wherein each

pavilion side has a four sided facet having a facet corner at the culet.

Reissue Application No.: 10/626,376 Reissue of Patent No.: 6,363,745

Page 11

23. (Previously presented) A cut cornered mixed cut gemstone, comprising a girdle, a crown above said girdle and a pavilion below said girdle,

said crown comprising a width and length formed by two pairs of opposing crown sides and a substantially flat table having four sides and four corners, said table corners being substantially less in length than said table sides, said pavilion having a bottom and comprising a substantially centrally located culet at the bottom of the pavilion, said pavilion also comprising two pairs of opposing pavilion sides and four corners defined by distinct rib lines extending from the girdle to the culet, wherein each pavilion corner has a plurality of facets, wherein each pavilion side comprises a plurality of facets each having a facet corner intersecting at a common facet intersection point and each pavilion facet having no more than four sides, and wherein each pavilion side has a facet with a facet corner at the culet, and wherein each rib line extends in a substantially straight line when viewed from the bottom of the pavilion.